

Future Flight Design			
2003 Science			
Content Standards			
New Mexico Science			
Grade 5			
Activity/Lesson	State	Standards	
Air Transportation Problem	NM	SCI.5.I.I.I.1	Plan and conduct investigations, including formulating testable questions, making systematic observations, developing logical conclusions, and communicating findings.
Air Transportation Problem	NM	SCI.5.I.I.I.2	Use appropriate technologies (e.g., calculators, computers, balances, spring scales, microscopes) to perform scientific tests and to collect and display data.
Air Transportation Problem	NM	SCI.5.I.I.II.2	Understand that scientific conclusions are subject to peer and public review.
Air Transportation Problem	NM	SCI.5.I.I.III.2	Use mathematical skills to analyze data.
Air Transportation Problem	NM	SCI.5.I.I.III.3	Make predictions based on analyses of data, observations, and explanations.
Air Transportation Problem	NM	SCI.5.III.I.I.2	Describe how various technologies have affected the lives of individuals (e.g., transportation, entertainment, health).
Aircraft Design Problem	NM	SCI.5.I.I.III.4	Understand the attributes to be measured in a scientific investigation and describe the units, systems, and processes for making the measurement.
Aircraft Design Problem	NM	SCI.5.II.I.III.3	Identify forces in nature (e.g., gravity, magnetism, electricity, friction).
Aircraft Design Problem	NM	SCI.5.II.I.III.4	Understand that when a force (e.g., gravity, friction) acts on an object, the object speeds up, slows down, or goes in a different direction.
Future Flight Design			
2003 Science			
Content Standards			
New Mexico Science			
Grade 6			
Activity/Lesson	State	Standards	
Air Transportation Problem	NM	SCI.6.I.I.II.2	Understand that scientific investigations use common processes that include the collection of relevant data and observations, accurate measurements, the identification and control of variables, and logical reasoning to formulate hypotheses and explanations.
Aircraft Design Problem	NM	SCI.6.II.I.III.1	Know that every object exerts gravitational force on every other object dependent on the masses and distance of separation (e.g., motions of celestial objects, tides).

Future Flight Design			
2003 Science			
Content Standards			
New Mexico Science			
Grade 7			
Activity/Lesson	State	Standards	
Air Transportation Problem	NM	SCI.7.I.I.I.1	Use a variety of print and web resources to collect information, inform investigations, and answer a scientific question or hypothesis.
Air Transportation Problem	NM	SCI.7.I.I.III.2	Use mathematical expressions to represent data and observations collected in scientific investigations.
Future Flight Design			
2003 Science			
Content Standards			
New Mexico Science			
Grade 8			
Activity/Lesson	State	Standards	
Air Transportation Problem	NM	SCI.8.I.I.I.2	Use a variety of technologies to gather, analyze and interpret scientific data.
Air Transportation Problem	NM	SCI.8.I.I.I.3	Know how to recognize and explain anomalous data.
Air Transportation Problem	NM	SCI.8.I.I.III.1	Use mathematical expressions and techniques to explain data and observations and to communicate findings (e.g., formulas and equations, significant figures, graphing, sampling, estimation, mean).
Air Transportation Problem	NM	SCI.8.III.I.I.4	Critically analyze risks and benefits associated with technologies related to energy production.
Aircraft Design Problem	NM	SCI.8.II.I.III.F.1	Know that there are fundamental forces in nature (e.g., gravity, electromagnetic forces, nuclear forces).
Aircraft Design Problem	NM	SCI.8.II.I.III.F.2	Know that a force has both magnitude and direction.
Aircraft Design Problem	NM	SCI.8.II.I.III.F.3	Analyze the separate forces acting on an object at rest or in motion (e.g., gravity, elastic forces, friction), including how multiple forces reinforce or cancel one another to result in a net force that acts on an object.
Aircraft Design Problem	NM	SCI.8.II.I.III.M.7	Know that an object's motion is always described relative to some other object or point (i.e., frame of reference).
Aircraft Design Problem	NM	SCI.8.II.I.III.M.8.a	Objects in motion will continue in motion and objects at rest will remain at rest unless acted upon by an unbalanced force (inertia).

Aircraft Design Problem	NM	SCI.8.II.I.III.M.8.b	If a greater force is applied to an object a proportionally greater acceleration will occur.
Aircraft Design Problem	NM	SCI.8.II.I.III.M.8.c	If an object has more mass the effect of an applied force is proportionally less.
Aircraft Design Problem	NM	SCI.8.III.I.I.4	Critically analyze risks and benefits associated with technologies related to energy production.